Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the matter of	)	
	)	
Reorganization and Revision of Parts	)	
1, 2, 21, and 94 of the Rules to	)	WT Docket No. 94-148
Establish a New Part 101 Governing	)	
Terrestrial Microwave Fixed Radio	)	
Services	)	

COMMENTS IN RESPONSE TO
NOTICE OF PROPOSED RULEMAKING

The Wireless Cable Association International, Inc. ("WCAI"), by its attorneys and pursuant to Sections 1.415 and 1.419 of the Commission's Rules, hereby submits its comments in response to the *Notice of Proposed Rulemaking ("NPRM")* in this proceeding. [1/]

WCAI is the trade association of the wireless cable industry. Its members include the operators of virtually every wireless cable system in the United States, as well as licensees in the Multipoint Distribution Service ("MDS") and various point-to-point microwave services that provide transmission capacity to wireless cable systems. In addition, WCAI's membership includes the manufacturers of virtually all of the wireless cable equipment, including MDS transmitters and point-to-point microwave radio systems. As such, WCAI has a vital interest in the outcome of this proceeding.

[1/] *Reorganization and Revision of Parts 1, 2, 21, and 94 of the Rules to Establish a New Part 101 Governing Terrestrial Microwave Fixed Radio Services*, FCC 94-148, WT Docket No. 94-148 (rel. Dec. 28, 1994).

At the outset, WCAI applauds the Commission for proposing in the *NPRM* to simplify the rules governing the common carrier and private services currently contained in Parts 21 and 94 of the Commission's Rules and to consolidate those rules into a new Part 101. Wireless cable systems make extensive use of point-to-point microwave facilities to relay programming from origination sites to transmission headends. Thus, WCAI supports the Commission's efforts to consolidate and simplify its rules.

While WCAI generally supports the Commission's efforts in the *NPRM*, WCAI is concerned that in the process of rewriting Part 21 to eliminate any reference to point-to-point services, the Commission has inadvertently proposed a substantive change to the rules governing MDS that, if adopted, would have an adverse impact upon the wireless cable industry. Specifically, WCAI opposes that portion of the proposed rules accompanying the *NPRM* that would limit the transmitter output power of MDS stations to 100 watts.

Under Sections 21.107(b) and 21.904 of the Rules, an MDS station may operate at any transmitter output power so long as the EIRP remains within certain limits. [2/] The use of EIRP, rather than transmitter output power, to regulate MDS transmissions was adopted in

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[2/]A 2000 watt EIRP limit applies when the MDS station in question is operating utilizing an omnidirectional transmission antenna. A system utilizing a cardioid antenna may transmit with a higher EIRP. *See* 47 C.F.R. §21.904.

1990 in the *Report and Order in General Docket No. 90-54* ("*Gen. Docket No. 90-54 R&O*"). [3/] As the Commission stated at that time:

> Commenters have overwhelmingly supported our conviction that EIRP is the most appropriate output power standard. Because of differences in transmitting equipment, the specification which is most appropriate is the one which includes every gain and attenuation in the transmission system, and provides the greatest flexibility in system design. EIRP takes into account transmitter output power, line losses, and the gain and directionality of the antenna itself. In addition, technology for measurement of EIRP has long been matured. Furthermore, given a knowledge of transmitter power, line losses and antenna gain characteristics, one can estimate EIRP quite accurately without taking measurements for the total system. [4/]

Indeed, the Commission has recently acknowledged that "the MDS rules were recently changed to provide for a maximum EIRP, rather than a maximum value for transmitter output power" and has proposed to permit MDS licensees to change their transmission parameters without notification to the Commission providing the resulting EIRP does not change. [5/]

The Commission's approach in this regard is hardly surprising. The Commission has recognized in many other services that it is more appropriate to regulate EIRP than to limit

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[3/] *Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands: Affecting - Private Operational-Fixed Microwave Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service, Report and Order,* 5 FCC Rcd 6410 (1990) [hereinafter cited as "*Gen. Docket No. 90-54 R&O*"].

[4/] *Id.,* at 6419.

[5/] *Amendment of Parts 21 and 74 of the Commission's Rules with regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Sections 309(j) of the Communications Act - Competitive Bidding*, 9 FCC Rcd 7665, 7675 (1994).

the transmitter output power. [6/] Indeed, the Commission has recognized in Paragraph 17 of this very *NPRM* that restrictions on EIRP are more appropriate than restrictions on transmitter output power for the microwave service that are the subject of this proceeding.

Yet, for reasons never explained in the *NPRM*, the proposed rules would return the MDS to limits on transmitter output power that were long ago abandoned. [7/] By adding a column titled "Maximum Allowable Transmitter Power for a Fixed Station" to proposed Section 21.107, the Commission is proposing to limit the transmitter output power for MDS stations to 100 watts. This unexplained revision to Section 21.107(b) would reinstate the concept of limiting the transmitter output power, a concept which the Commission recognized in the *Gen. Docket No. 90-54 R&O* as obsolete. [8/] The proposed 100 watt limit on transmitter output power on MDS stations is particularly inappropriate in light of the fact that the Commission has type-accepted 200 watt MDS transmitters and that wireless cable systems have been designed in reliance on the availability of transmission equipment capable of transmitter output power in excess of 100 watts. [9/]

For the foregoing reasons, WCAI respectfully requests that the Commission revise the rules proposed in the *NPRM* to delete the restrictions proposed in Section 21.107 that would

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[6/] *See, e.g., Amendment of Part 74 of the Commission's Rules with Regard to the Instructional Television Fixed Service,* 9 FCC Rcd 3348 (1994).

[7/] *See Gen. Docket No. 90-54 R&O,* 5 FCC Rcd at 6419.

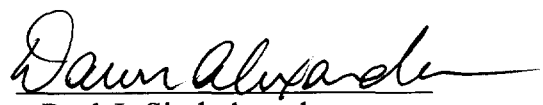
[8/] *See id.*

[9/] A copy of a Commission grant of authorization of type-acceptance for a 200 watt transmitter is attached hereto as Exhibit A.

unnecessary restriction, the Commission can assure that MDS licensees will continue to enjoy the flexibility in station design that is often essential to a viable wireless cable service.

Respectfully submitted,

THE WIRELESS CABLE ASSOCIATION INTERNATIONAL, INC.

By: 

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Its Attorneys

February 16, 1995

EXHIBIT A

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

GRANT OF EQUIPMENT AUTHORIZATION

Type Acceptance

Communication Microwave Corp
395 Oakhill Road
Crestwood Industrial Park
Mountaintop, PA 18707

Date of Grant: July 21, 1994

File No.: 31010/EQU 17.9

Application dated: June 15, 1994

Attention: James Fisher, Engineering Manager

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

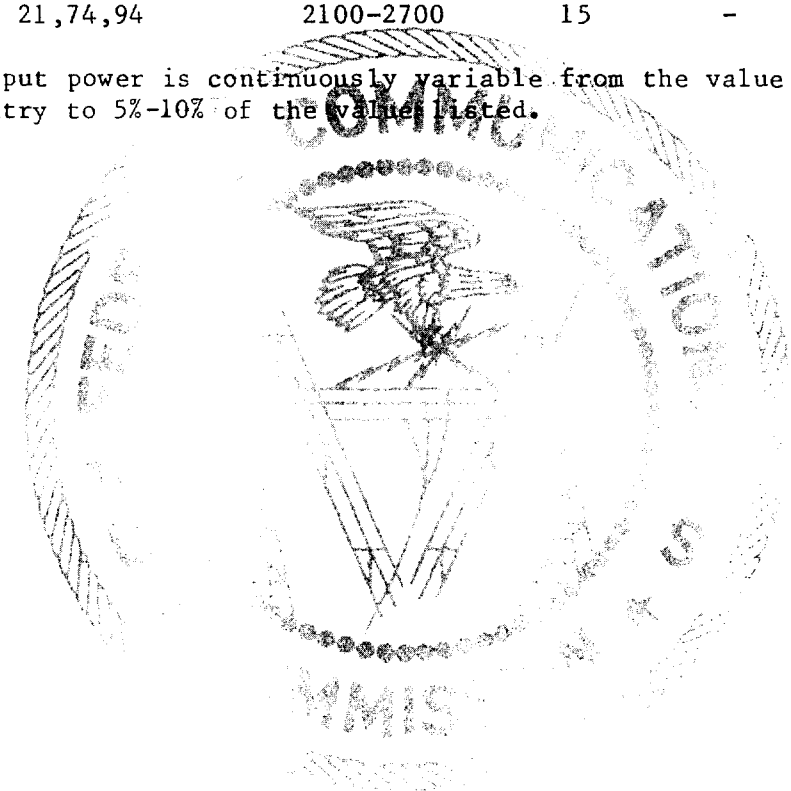
FCC IDENTIFIER [redacted]P8TUSB200B

Name of Grantee [redacted]mmunication[redacted]

Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
BC	21,74,94	2100-2700	200	1KHz	5M75C3F
BC	21,74,94	2100-2700	15	-	250KF3E

BC: The output power is continuously variable from the value listed in this entry to 5%-10% of the value listed.



mc 8315048002

In correspondence concerning this grant, please refer to the FCC IDENTIFIER, File No., and date of grant.

FCC 731A
October 1991